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ABSTRACT

The two parts of this paper discuss the theory and practice of using journal writing as an aid to student learning and teachers' professional development. Part one reports on the psychology of learning through writing, enumerates the connections between writing and learning, and explains why journal writing is a powerful learning tool, uniquely suited for professional thought and reflection. The point emphasized in this first section is that writing requires the writer to simultaneously represent ideas in all three of Jerome Bruner's modes of representation--enactive, ikonic, and symbolic--forcing a degree of thought integration not found in other modes of expression. Feedback and opportunity for reflection are also cited as powerful writing features that support learning. Examples of using intensive writing as part of graduate and undergraduate courses in education are also discussed. Part two of the paper describes "systematic reflection," a specific set of journal-keeping techniques that have been found useful in helping teachers take control of their own professional development. This section also contains descriptions of a series of exercises incorporated in the manual, "Teacher Journal," and reports on the field trial of this manual with experienced teachers and undergraduate education majors. (RL)

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REFLECTIVE JOURNAL WRITING:
THEORY AND PRACTICE

Robert J. Yinger and Christopher M. Clark

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Abstract

The authors discuss their experiences with journal writing as an aid to learning by students and to professional development for teachers.

In Part 1, Robert J. Yinger reports on the psychology of learning through writing. He points out that writing requires the writer to simultaneously represent ideas in all three of Bruner's modes of representation: enactive, ikonic, and symbolic, forcing a degree of integration of thought not found in other modes of expression. Feedback and opportunity for reflection are also cited as powerful features of writing that support learning. The deliberate structuring of meaning and the active and personal nature of writing are also thought to contribute to the power of writing as a learning tool. Examples of using episodes of intensive writing as part of graduate and undergraduate courses in education are discussed.

In Part 2, Christopher M. Clark discusses the development of a set of techniques called "systematic reflection" by teachers and prospective teachers. Systematic reflection involves three steps: intensive writing, reflection, and dialogue. The combination of a series of exercises entitled "Teacher Journal" and the field trial of this manual with experienced teachers and with undergraduate education majors are described.

Part 1

REFLECTIVE JOURNAL WRITING: THEORY

Journal Writing as a Learning Tool

REFLECTIVE JOURNAL WRITING: THEORY

Journal Writing as a Learning Tool¹

Robert J. Yinger²

"If you really want to clarify your thoughts, try writing them down."

"I never realized how I felt until I tried to express my feelings in writing."

"I thought I understood it until I tried to write it down."

These familiar statements express what most people know from experience about the connections between the act of writing and the learning process. Writing forces people to think in ways that clarify and modify their ideas. In short, people learn from writing.

This paper enumerates the connections between writing and learning and suggests why journal writing is a powerful learning tool, one uniquely suited for professional thought and reflection. Several examples included here show how my colleagues and I have used journal writing as a mode of learning among teachers and teacher education students.

Writing and Learning

Written language not only has provided humankind with a powerful means of expression and communication, but theorists such as Vygotsky (1962, 1978), Luria (1959; Luria & Yudovich, 1971), and Bruner (1966, 1971) suggest that

¹This paper was presented at the annual meeting of the American Association of Colleges of Teacher Education, Detroit, 1981.

²Robert J. Yinger is a former IRT senior researcher with the Teacher Planning Project and a professor of education at the University of Cincinnati.

written language plays an important enabling role for many higher cognitive functions. Recently, researchers interested in writing processes have pointed out the unique ways that writing contributes to learning. Britton (1972) has proposed that people understand and learn from events "by giving them shape in language." Odell (1980) suggests that the conscious exploration demanded by writing improves a person's understanding of the subject at hand. In her influential paper, "Writing as a Mode of Learning," Emig (1977) argues that "writing represents a unique mode of learning--not merely valuable, not merely special, but unique" (p. 122). Emig argues for writing as unique learning by describing characteristics of writing that correspond to characteristics of successful learning strategies. Emig names four major characteristics, discussed below, that describe the important connections between these two processes.

The Writing Process: Multirepresentational and Integrative

People come to know and understand the world as they represent in some manner their encounters with events. Various avenues for representing reality have been discussed by psychological theorists, most notably by Jerome Bruner. Bruner (1966) posits that people come to know anything through three modes of representation: doing it (the enactive mode); making a picture or image of it (the ikonic mode); or symbolizing it, as in language (the symbolic mode).

From a person's early development onward, representation through action, image, and symbol have been closely tied to the activities of hand, eye, and mind, (e.g., Bruner, 1969; Piaget, 1952). Says Emig, "What is striking about writing is that, by its very nature, all three ways of dealing with actuality are simultaneously or almost simultaneously deployed" (1977, p. 124). Writing,

like drawing, is multirepresentational from a cognitive point of view because it involves eye, hand, and mind in a supportive and facilitative complex. Lockard (1974) has coined the term "eyemindhand" to represent the inseparable interaction of these components during the act of drawing. This same unitary concept seems to represent the writing process as well.

What powers this multirepresentational quality of writing and how is learning enhanced through writing? Research and theory suggest the following.

First, recent cognitive research on learning and memory indicate that learning is enhanced and memory is improved when the memory elaborates information. This elaboration can be accomplished through redundancy or by increasing the "depth of processing" (Craik & Lockart, 1972) in the memory. Similar reasoning leads one to expect that learning (and memory) can be enhanced through elaboration and redundancy by processing events through various codes. That is, by representing information or events in both image and symbol, one could expect richer memories and representations than through either mode of representation (code) alone. The writing process provides this deeper processing through elaboration as one attempts to express and communicate one's knowledge and feelings through symbols. Nystrand and Wderspiel (1977) and Bereiter (1980) have referred to this process by stating that writing serves an "epistemic function" in that representations of human knowledge are modified in the process of being written down. In short, as people shuttle back and forth between images, actions, and symbols, they enrich their knowledge, and in effect, they learn.

Second, the act of writing forces the writer to express in symbols knowledge that was originally represented (and stored in memory) in a different form. This process of re-presenting knowledge can have important repercussions for individual understanding. The manipulation and transforma-

tion of knowledge can facilitate new understanding and learning as one perceives experience in a different light. Symbolic manipulation through written language provides a means, not only for representing experience, but also for transforming it. Bruner illustrates the potential of this process in terms of "effective productivity."

Having translated or encoded a set of events into a rule-bound symbolic system, a human being is then able to transform that representation into an altered version that may but does not necessarily correspond to some possible set of events. It is this form of effective productivity that makes symbolic representation such a powerful tool for thinking or problem solving: the range it permits for experimental alteration of the environment without having, so to speak, to raise a finger by way of trial and error or to picture anything in the mind's eye by imagery. "What if there were never any apples?" a four-year-old asked upon finishing one with gusto! (1966, p. 37)

Writing is integrative in that it seems to involve one's total intellectual equipment. Emig argues that "writing involves the fullest possible functioning of the brain, which entails the active participation in the process of both the left and right hemispheres" (p. 125). She goes on to cite some of the recent split-brain research indicating that the right cerebral hemisphere contributes to creativity (and the writing process in particular) as the seat of emotions and the source of intuition. Other right-brain characteristics that may contribute to writing are its orientations toward synthesis, analogic thought, and holistic perception. (See Edwards, 1979 for a very readable summary of this split brain research.) Writing beyond merely communicative purposes most likely draws upon these right-brain functions.

Writing: Self-Provided Feedback

In recent years attention has shifted from the reinforcement functions of feedback to its information functions (McKeatchie, 1974; Gagné, 1975).

Although psychologists have long recognized the power of feedback, they are now also recognizing the value of knowledge of results for modifying process as well as product (Hammond, 1971). It is generally agreed that a goal of instruction is to provide learners with skills and strategies that will enable them to monitor and evaluate their own learning. Numerous strategies have been devised to encourage this process of self-sufficient learning. Phrases like "learning how to learn" or "learning how to think" are cornerstones of more than a few school curriculum programs.

The act of writing is an unusually powerful instance of both immediate and long-term self-provided feedback. The unique proximity of process and product in writing provides a "closed-loop" learning cycle. What has just been written is immediately available for re-reading, evaluation, and revision. In fact, recent research on the writing process (e.g., Flower & Hayes, Note 1) presents writing as a cyclical process of which re-reading and reflection are important components. As writers read the words they have just written, the words tell them whether or not they have communicated as they want to. Writers' inner purposes and goals, the expressive component of writing, provide a model of sorts for immediate matching and comparison. By posing the question, "Is that what I really think and feel?" writers are learning about themselves.

Though other activities, such as speaking and thinking, occasionally possess some of the immediate feedback characteristics of writing, they rarely if ever provide the same kind of long-term feedback. The fact that writing captures and preserves thought and feeling makes written products available as a record of the evolution and development of thought and feeling. This record is available from most forms of writing; in particular, diaries and journals are often employed as a means of talking and listening to one's self.

Writing Requires Deliberate Structuring of Meaning

At all levels, one learns by making associations and connections among various bits of knowledge. In the last 20 years, learning researchers have moved from a fairly mechanistic view of learning as a process of connecting various stimuli and responses, to a more complex view of learning as a process of establishing and modifying cognitive structure. This cognitive view emphasizes changing and elaborating learners' representations of the world as they attempt to make sense of their environment and the actions that occur within it. Learning, then, requires establishing connections and relationships; people learn as they relate new information to what they already know.

The act of writing requires this same kind of connecting and organizing. When one writes, the lexical, syntactical, and rhetorical constraints of language demand explicit and systematic symbol manipulation. Vygotsky (1962) refers to this unique demand of writing when he states that writing requires "deliberate semantics--deliberate structuring of the web of meaning" (p. 100). Writing enforces these demands on organization and explicitness because the non-verbal and contextual cues that are present in spoken language are not available to support meaning during written communication. This manipulation, reflection, and deliberation required by writing is another reason to view writing as a powerful mode of learning.

Writing: Active and Personal

Learning theorists now widely acknowledge the importance of active engagement for learning. The cognitive view of the learner emphasizes that learning chiefly occurs when one actively seeks to interpret and make sense of the world. Recent educational theory and research have emphasized the strong connections between active engagement in learning activities and

learning outcomes (Bloom, 1974; Berliner, 1979). Increasing time on task or engaged time is currently a popular approach to improving learning in classrooms (Rosenshine, 1979).

Writing is active and engaging. Unless the pen or pencil engage with the paper, unless words and sentences appear, unless thought actively expresses symbols by the movements of the hand, then is one really writing? Much of the discussion above argued that writing actively engages beyond the physical sense. The act of writing sets off and sustains itself only when accompanied by the cognitive activities of structuring, organizing, re-reading, reflecting, modifying, and so on. In this cognitive sense is writing most active, and in this sense is learning activity most appropriately defined.

Successful learning is also personal. It is personal in the sense that every learner seeks to understand in terms that make sense to him/her; learning is a quest for personal meaning. Bruner (1962) captures the personal nature of learning when he states that people do not deal directly with the world but construct reality as they present personally the meaning of events. The role of the subjective and personal is also a major theme of Polanyi's (1958) Personal Knowledge, in which he notes that "into every act of knowing there enters passionate contribution of the person knowing what is being known" (p. viii).

Educational theorists acknowledge successful learning as being personal in another sense. Research has begun to describe and better understand the functions of individual differences in learning (Cronbach & Snow, 1977). Learners differ in numerous ways: in pace, in style, in preference of environment and of instructional mode, and so on. Many theorists believe that by matching learning situations with personal differences, learning can become more efficient and successful.

This thinking has become most widely applied to differences in rate of learning. John Carroll's seminal thinking on the relation between time and learning (Carroll, 1963) and Benjamin Bloom's (1968; 1974) development of these ideas has borne fruit in such widely known instructional strategies as mastery learning and individualized instruction. These strategies consistently show that learning success can be increased by matching instructional pace to learning pace (e.g., Block, 1971).

The process of writing is personal in both of the senses mentioned above. A central theme of my argument thus far has been the importance of the cognitive activity involved in writing. This activity is highly personal in nature. Its self-paced nature seems to strongly facilitate learning.

Being much slower than speech, the pace of writing seems to better match the pace of learning. Luria writes,

Written speech is bound up with the inhibition of immediate synpractical connections.³ It assumes a much slower, repeated mediating process of analysis and synthesis, which makes it possible not only to develop the required thought, but even to revert to its earlier stages, thus transforming the sequential chain of connections in a simultaneous, self-reviewing structure. Written speech thus represents a new and powerful instrument of thought (Luria & Yudovich, 1971, p. 118).

The act of writing, then, not only moves writers along in thinking, but moves them at a pace that is "self-rhythmed" (Emig, 1977). Although writing as a self-paced mode of learning has been sitting in plain sight in the classroom, it may not have been recognized as such.

The Journal: Learning from Writing

Thus far, I have argued that writing, because of its active and personal nature, its cognitive demands, and its feedback characteristics, makes pos-

³Luria defines *synpraxis* as "concrete-active" situations where language does not exist independently but only as part of an ongoing action "outside of which it is incomprehensible" (Luria & Yudovich, 1971, p. 50).

sible unique forms of extended and involved thought. Writing enables both a construction of meaning and an investigation and enlarging of reality--feats that are difficult to achieve without written language (Olson, 1977). Writing, particularly journal writing, with its focus on personal thoughts, feelings, and reflections, puts writers into a position to learn at least four important things about themselves: (1) what they know, (2) what they feel, (3) what they do (and how they do it), and (4) why they do it. Christopher Clark and I have used journal writing techniques in a variety of ways to help students and professionals tap these areas. Further description of these four areas and descriptions of our methods follow.

What Writers Know

Experience provides a continuing influx of new information in the form of names, facts, concepts, principles, and so forth. Much of this information is stored in a verbal form that can be communicated as a sentence or proposition. For this reason, theorists refer to this type of information as propositional knowledge. This is "knowledge about" or "knowledge that," which enables the linking and organization of information to construct meaning. When one knows that Paris is the capital of France, or that seven times seven is 49, this is propositional knowledge.

People are often unaware of how much they know about the world, a specific situation, or themselves, until they take the time to think about and make explicit this knowledge. Especially true is it in situations where they have functioned for some time and to such an extent that much of their action has become automatic or routinized. Journal writing, researchers have found, creates a situation that encourages explicitness, often leading to a renewed awareness of what a person knows.

All four of the aspects of writing mentioned earlier contribute to people's clarification of what they know from experience. For instance, the recoding of information from one mode of presentation to another, the feedback from what has been written, and the connections and structuring that writing promotes all facilitate awareness of their propositional knowledge.

Even more interesting, however, are the psychological requirements of writing such as the need to structure and represent meaning that may, in fact, enable the writers to construct new meaning, or new knowledge. By writing out what they know and by juxtaposing this knowledge with other pieces of knowledge to create new connections, new relations and structures come into being and new knowledge is created. This same process may also allow one to see gaps or inconsistencies in one's knowledge, which in turn may promote further learning and reorganization.

What Writers Feel

Writing also promotes an awareness and possible clarification of another important aspect of inner life--feelings and emotions. This affective knowledge incorporates a variety of information expressed in a number of arrangements from clearly statable attitudes and values to vague, visceral emotional reactions. Writing can provide a means to tap this information, even information that is far from being verbalized.

Writing forms a gateway to feelings and emotions through the symbolic function of words. Words carry personal meaning as well as conventional meaning. The meaning of words has been shaped by past experience in such a way that words are often surrounded by feelings and thus evoke certain emotional responses in the writer.

Philosopher Eugene Gendlin (1978) has described the attention that writers seem to pay to the feelings that words or sentences evoke as "felt sense." He has described this felt sense as

the soft underbelly of thought...a kind of bodily awareness that... can be used as a tool...a bodily awareness that...encompasses everything you feel and know about a given subject at a given time....It is felt in the body, yet it has meanings. It is body and mind before they are split apart. (p. 36, 165)

Sondra Perl (1981) has observed this phenomenon in her research on written composition:

When writers are given a topic, the topic itself evokes a felt sense in them. This topic calls forth images, words, ideas, and vague fuzzy feelings that are anchored in the writer's body. What is elicited, then, is not solely the product of a mind but of a mind alive in a living, sensing body. (p. 365)

The personal nature of journal writing can promote the exploration of felt sense and personal emotional knowledge. This aspect of journal writing has been promoted as an important benefit of this mode of writing (e.g., Progoff, 1975; Ranier, 1978). Without the threat of criticism by an external audience, writers can be free to pay attention to and explore their feelings. The fact that propositional knowledge has links to felt sense can lead to examining and evaluating these relations. By acknowledging these links a writer can work out conflicts or deal with barriers that have been constructed within certain situations. Journal writing, then, provides a means for dialogue between the subjective and the objective, between personal meaning and corporate meaning.

What Writers Do (and How They Do It)

Journal writing can also be a window to process. Writers can become aware of not only what they know and how they feel, but of what they do and how they do it. Theorists have referred to this as procedural knowledge.

It can be thought of as "knowing how" versus the "knowing that" of propositional knowledge. Procedural knowledge includes the intellectual skills and operations that enable the synthesis and coordination of thought and action. Knowing how to multiply fractions, program a computer, referee a baseball game, or plan and implement a social studies lesson all fall into this category of knowledge.

Journal formats have long been used to record what people do. These range from the navigational logs of ships' pilots to the training logs of elite athletes to the elaborate records of chefs or craftsmen. In these formats the emphasis is put upon process--what was done--rather than upon knowledge or feeling (though this information is often included as well).

Practitioners can pay attention to what they do; this information can be of immense value in the understanding and improvement of practice. By producing a written record of action, processes become amenable to reflection and evaluation. This can be especially beneficial for those types of action that are too demanding to afford reflection at the time of performance. By allowing an examination of action apart from the pressures of performance, it becomes possible to think about the adequacy and effectiveness of practice. Opportunities for this kind of reflection are unfortunately few and far between in most professional activity.

Why Writers Do It

As writers begin to think about and understand what they do and how they do it, then the reasons underlying behavior can be explored. Writing taps some fairly deep aspects of cognition, variously referred to as implicit theory, personal perspective, personal theory, and naive psychology, and so on. These terms attempt to describe those frameworks through which people

view their world. These unique ways of looking at and making sense of external reality provide the basis for how one thinks and acts. As one begins to try to make these theories and perspectives more explicit, personal motives and rationales become more accessible. And like the other three areas of knowledge discussed above, once this information is written down it becomes accessible to reflection and judgment and can become a basis for personal growth and learning.

In addition to better understanding the personal, internal forces operating on performance, the exploration of reasons for action can also help elucidate the influences of outside forces. Since people constantly function in social contexts, there are a number of cultural, social, and interpersonal pressures that influence their thinking and performance. Most situations also include a number of physical and psychological task constraints. Again, I believe that an awareness of these influences provides individuals with an opportunity to come to a new understanding of themselves and their actions that, in turn, can facilitate personal development.

Writing for Learning

For several years, my colleague Christopher Clark and I have used journal-writing methods to encourage the kinds of learning discussed in the previous section. At times we have asked our students to keep more traditional journals for a specific purpose; at other times, we have borrowed specific journal-writing techniques to promote certain types of learning. Three of these applications will be discussed here.

During the last year, I have been experimenting with a learning and evaluation method I call "guided essay writing." It is designed to provide my students, many of whom are teachers, with a writing experience that not

only serves evaluation purposes but that also encourages integration of, personalization of, and reflection about course content. Guided essay writing is patterned after a journal-writing technique called "systematic reflection" developed by Christopher Clark (Note 2). Simply stated, systematic reflection involves three steps: (1) writing down ideas, (2) reflecting upon and elaborating these ideas, and (3) discussing the ideas with a colleague.

Guided essay writing incorporates these writing methods in the following manner. At the first class meeting of the term, after the method has been explained to the class, a list of study questions is distributed. These questions are divided into three groups of approximately four questions, one group for each of the three essays to be written during the term. During the second class meeting, time is taken to further familiarize students with systematic reflection and to give them an opportunity to practice the method prior to the first essay.

Three essays typically are written during a 10-week quarter, each taking place in two "writing cycles." On days specified in advance, the first hour of the class period is devoted to the first writing cycle. It follows this format: (1) the instructor chooses one question from the study guide on which the students are to write, (2) the students write intensively⁴ on the question for 30 minutes without notes or other aids, (3) students reflect upon what they have written for 10 minutes (they may at this time edit, delete, raise questions, note gaps, etc.), and (4) each student meets with two other students for 20 minutes to share, discuss, critique, and elaborate their ideas.

⁴Intensive writing is a type of focused freewriting (see for instance Elbow, 1973) that encourages writers to put down on paper as many of their thoughts as possible within a certain amount of time without concern for editing, grammar, punctuation, and the like. The goal is to write without stopping and to avoid the barriers that might impede the writing process.

The second writing cycle requires that each student take his or her first draft, reflections, and discussion notes and rewrite the essay for the next class session. The students may use any additional resources they need for the final revision. The products of the first writing cycle are turned in with the final revision to document each student's full participation in the complete process.

Though it is still in an experimental phase, guided essay writing has received extensive support and high evaluations from students. It has greatly reduced test anxiety, provided a technique for students to begin their essay writing, and has increased the overall quality of student writing. Just as important, the write-revise-dialogue sequence of the first writing cycle has proven to be a significant learning experience. The unrestricted nature of intensive writing seems to promote personalized, integrative, and exploratory writing that often leads to new awareness and learning.

A second writing technique that we have used to promote personal awareness and learning is what we call "implicit theory exercises." These exercises are designed to encourage students to begin exploring their belief systems or implicit theories about students, classrooms, learning, teaching, and so forth. These exercises usually take the form of short essays that require an attempt to make explicit the personal theories the students have about, say, learning or instruction. Certain questions are provided to help the students begin probing their beliefs. For instance, here are some of the questions that we provide for the "your implicit theory of instruction" exercises. "What is your definition of instruction?" "What are the elements or processes that operate in your version of instruction?" "How does your notion of instruction portray the learner?" "What does your idea of instruction suggest that an instructor should do or not do?"

Students report that these essays have benefited them in helping to clarify their beliefs, even though many of them state that these essays are extremely difficult to write. (Since these theories are implicit and often out of consciousness, it takes some effort to make them explicit.) Further, the writing and thinking seem to provide students with a starting point for studying and evaluating related theories and research findings that they encounter later in their studies.

A final writing technique that I want to mention is the use of teaching journals. Journals and logs have been widely used as a part of teacher training. Our use of journal keeping is usually more restricted, focusing on one process or aspect of teaching. For instance, I have asked students to keep a detailed journal of the design processes occurring as they plan a specific piece of instruction. This exercise is intended to give each student access to a very complex cognitive process, and in the case of planning, access to a process that seems to be very different in practice than in most prescriptive theories (see, for instance, Yinger, 1980; Clark & Yinger, Note 3; Note 4). As students begin paying attention to what they do and how they do it, they learn how certain processes function personally, which provides another departure point for evaluating and integrating new information presented to them during the course of instruction.

Conclusion

Teaching is primarily an oral profession. As a result, teacher education often focuses on developing oral presentation skills. Writing is an important skill for teachers not only because it is an important communication skill that every educated adult should possess, but also because it is a means toward personal learning and development.

Part 2

REFLECTIVE JOURNAL WRITING: PRACTICE

Journal Writing and Professional Development

Unless a teacher is [also] such a student [of teaching, of subject matter, and of mind-activity], he may continue to improve in the mechanics of school management, but he cannot grow as a teacher, an inspirer and director of soul-life.

John Dewey, 1904

Give me, a firm place to stand, and I will move the earth.

On the Lever

Archimedes

REFLECTIVE JOURNAL WRITING: PRACTICE

Journal Writing and Professional Development: Let the Learner do the Learning⁵

Christopher M. Clark⁶

Teachers know that they cannot force students to learn. Effective teaching involves planning and setting up conditions that support and encourage learning, being helpful to the learners throughout the process, and, most importantly, staying out of the way of their learning (i.e., not doing any of the many things that could sabotage learning). These ideas apply equally to preschool children, college students in teacher education, and to experienced teachers as adult learners. They can be summarized as a simply stated principle: Let the learner do the learning.

"Let the learner do the learning" is easier to say than to put into practice. Teachers want to teach, and, for many, teaching implies action, control, and intervention in the lives of students. A common image of effective teaching (or parenting, for that matter) is that of shaping a child in one's own image and likeness--a kind of latter day Genesis story. Furthermore, it is easy for teachers to feel that they have put in a good day's work if they have spent it striving to force their learning upon unwilling pupils. Or as one excellent kindergarten teacher once told me, "some day my principal is going to find out that what I do here is watch

⁵This paper was presented to the American Association of Colleges for Teacher Education, Detroit, 1981.

⁶Christopher M. Clark is the coordinator of IRT's Teacher Planning Project and a professor of education at Michigan State University.

five-year-olds play all day; and then I'll be out of a job." He was not running a "no-structure" kindergarten, and he was not working for a principal who had radically different ideas about the education of five-year-olds. Rather, he was feeling the tension between the prevailing image that a teacher ought to be at center stage, working, shaping, and molding little minds, and his own professional knowledge that kindergarteners need to learn from their own play, with minimal interference from adults.

In this paper my focus is on teachers and prospective teachers as learners. I describe a specific set of journal-keeping techniques that my colleagues and I have found useful in helping teachers take control of their own professional development--what we call self-directed professional development. At the outset I must emphasize two things: First, this is only one of many possible approaches to self-directed learning; second, we have only recently begun this work and have a great deal to learn about the applications of journal keeping to teacher education and professional development. We are not offering a panacea, but rather a promising starting point for inquiry, evaluation, and continued development.

During the late 1970's my colleague Robert Yinger and I were engaged in a series of research studies at the Michigan State University Institute for Research on Teaching. The general topic of our work was research on teacher planning (Yinger, 1980; Clark & Yinger, Note 3; Note 4). As part of this work we asked several teachers to write in journals, to describe their thinking and planning so we could learn more about the life history of a plan. We learned a great deal about the processes of planning and teacher thinking from these journal entries. But most surprisingly we learned that when teachers were given the opportunity to write about and reflect on what they were doing, remarkable and exciting changes took place.

Much to their own surprise, they found themselves solving problems and making sense of experiences that had previously been wearing them down. They rapidly came to see themselves as true professionals, and opened up for themselves what we have called the hidden world of teaching. Their morale improved and they began to see themselves as teachers who could make the most of any situation rather than as victims of circumstance and external influences. In short, these teachers had both the tools and the permission to grow, and grow they did.

These exciting side effects of our research led me to develop an in-service workshop entitled "Journal Keeping in Support of Personal and Professional Development." My experiences in offering this workshop to groups as diverse as private school teachers, school district administrators, public school teachers, and adults from 18 to 65 years of age at a church camp resulted in refinement and elaboration of this introduction to the journal keeping process. The result is a booklet called *Teacher Journal* (Clark, Note 2) that constitutes a self-contained system for getting started in journal keeping.

Teacher Journal

The heart of *Teacher Journal* is a process called "systematic reflection." Systematic reflection consists of three parts: (1) intensive writing in a journal, (2) re-reading of and reflection on what one has written, and (3) dialogue with another person about one's journal entry or thoughts and feelings about it. Intensive writing is a technique borrowed from Peter Elbow's book, *Writing Without Teachers* (Elbow, 1973). It is a way of getting a large number of thoughts and ideas on paper in a short time. The technique is also helpful in overcoming blocks to writing such as the feeling that one has nothing to say, that one can't find the

right words, that one's handwriting is too sloppy, or that one's sentences are ungrammatical. Intensive writing involves writing on a topic continuously for 10 minutes. Participants write as quickly as they can, and do not stop to edit, cross out, or change what they have written. If they run out of ideas to write, they shift to writing about how it feels to run out of ideas to write until they can get back on topic.

The reflection stage of this process consists of the participants re-reading what they have just written and thinking about it. At the very least, the reflection process involves sorting the ideas in a journal entry that are useful to them from the words and ideas that do not seem immediately useful. Making a simple list of the useful ideas in a journal entry is a powerful way of reflecting upon and organizing thoughts. While intensive writing serves to get ideas on paper quickly, reflection helps the writer to make sense of those ideas, see relationships among them, and perhaps organize them into a plan of action or into a form suitable for making a decision. Reflection is also a preparation for the third step in the systematic reflection process: dialogue.

Dialogue consists of one person talking to another for two or three minutes without interruption about a journal entry and his/her reflections on it. This process works best if both partners in the dialogue have just finished an intensive writing and reflection sequence on the same topic. The writers do not actually show their writing to their dialogue partners. They simply describe or elaborate one or two ideas, thoughts, or feelings that they had during the process. These descriptions or elaborations may be about the topic at hand or about their own reactions to the journal keeping process.

Listening during the dialogue stage can be as important as talking. Sometimes the writers will find that their partners have had similar ideas and feelings to their own. Often the writers will hear new ideas that may be useful to them. In either case, listening quietly to a colleague's ideas and being able to express one's self without interruption (even for two minutes) can be a refreshing experience. Teachers and others are often surprised at how much they learn in such a short time, and how dialogue puts one's own ideas into perspective.

The contents of *Teacher Journal* alternate between prose that describes journal keeping techniques and how they might be used and actual writing exercises in which these ideas can be tried out immediately. *Teacher Journal* is at once an instructional device and a practical journal itself. After an introduction to systematic reflection and a practice exercise, the contents include chapters on journal writing as a planning tool, personal development and problem solving, and descriptions of several approaches to journal writing that differ from systematic reflection, summarized from an excellent book by Tristine Rainer (1978) entitled *The New Diary*. The final 30 pages of *Teacher Journal* are blank sheets for use in continued journal keeping and experimentation. The booklet has a spiral binding and measures five by eight inches for convenient handling and writing.

Applications of Teacher Journal

There are many possible applications of journal keeping in general and *Teacher Journal* in particular that I have imagined, and several that I have tried out on a small scale. These include contexts as diverse as art education, creative writing, family therapy, marriage counseling, college-student learning assistance, and study of a second language. In

this paper I concentrate on two applications: the preparation of preservice teachers and the professional development of experienced teachers.

Undergraduate Teacher Education

Journal keeping by undergraduate teacher candidates can serve the important function of integrating course content, self-knowledge, and practical experiences with teaching and learning situations. No matter how highly structured a teacher preparation program may be, or how explicit the teacher education faculty is about how foundations courses, methods courses, courses in the disciplines, and supervised field experiences all fit together, it is the prospective teachers themselves who must do the integrating in a way that makes sense to them. A journal can serve as a powerful tool for meeting this integrative challenge. Journal keeping will help the student record, reflect on, and organize his/her learning and development in a personally useful way. And it also will communicate clearly to students that they are responsible for taking an active part in knowledge and skill acquisition and integration.

A small scale evaluation of journal keeping in undergraduate teacher education was conducted recently at Michigan State University. Thirty students in three sections of an introductory educational psychology course used Teacher Journal during Winter Term, 1981. The instructors incorporated systematic reflection exercises into the curriculum to explore topics such as motivation for wanting to become a teacher, effective teaching styles, implicit theories of learning, and self-assessment of communication skills. An end-of-term questionnaire indicated that the undergraduates found these writing, reflection, and dialogue exercises useful in relating what they learned from the course to their experiences outside class. A further benefit to students was that some used their

journal entries as starting points for the term papers required as part of the course. The instructors of these sections also participated in the journal writing process and reported that this has led to valuable insights about their teaching, particularly concerning the effects of their feelings toward and expectations about particular students.

A more extensive field trial of *Teacher Journal* was conducted Spring Term, 1981, with approximately 90 undergraduates in seven course sections, yielding results similar to the first study. This approach to journal keeping is flexible enough to be applied to the content of an introductory teacher education course, it can be made simple and unthreatening so that most students will feel free to participate, and it seems to have had some immediate beneficial effects for the teacher educators as well as for the students.

A second context in which journal keeping could be used by undergraduate teacher education majors is the practicum experience. We have not begun to test *Teacher Journal* in this application, but other researchers and teacher educators have used journal keeping as part of the clinical supervision process, with promising results. Glassberg (Note 5), while at the University of Minnesota, used a dialogue journal technique in which she, as practicum supervisor, carried on a written dialogue with each of 23 students in practice teaching. Glassberg reported that journal keeping, in combination with a special seminar on peer supervision and communication skills, led to positive changes in cognitive and moral development indices for 17 of the 23 participants. While the design of this study does not permit the researcher to attribute these developmental changes directly to the process of journal keeping, Glassberg's research, together with a study by B. J. Benham (Note 6) entitled "The Effect of Reflective Writing on Identity Maintenance in Student Teachers," and other research on adult development in teacher education (Oja,

Note 7) suggests that journal keeping can serve as a powerful but simple addition to the armamentarium of clinical supervision. This would be especially true if the teacher candidates were already in the habit of journal writing from earlier teacher education course experiences. Both the techniques and habit of thinking on paper and the contents of their earlier journal entries could serve to strengthen the link between theory and practice, and to show the student how far (s)he had come in the past few years.

Inservice Teacher Development

Applications of journal keeping to inservice teacher development are limited only by imagination. In inservice workshops I and others have introduced the systematic reflection process as a tool for stress management, teacher planning, and curriculum development; as a means of promoting professional communication between teachers; and as a device for drawing practical implications from research findings.

Two general statements can be made about inservice applications of journal keeping.

First, these techniques seem most immediately useful in workshops or other settings in which the task is to develop a usable written product (e.g., a teaching activity or a curriculum plan). In this kind of setting, journal keeping is a means to an end rather than an end in itself. The systematic reflection process provides a structure for using valuable meeting time profitably and for combining the ideas of several educators into a draft document in a short period of time.

The second general statement about journal keeping by inservice teachers is that rewarding results can correlate with the length of time and regularity

with which teachers use journal keeping as part of their professional repertoire. The most enthusiastic feedback on Teacher Journal that I have received has come months after the teachers were first introduced to it. Flashes of insight are much less likely to come when pen touches paper in one's first journal entry than at some later date when the mechanics of journal keeping and reflection are well practiced and a pressing or perplexing problem presents itself. An ideal setting for introducing journal keeping to experienced teachers would be a teacher center through which teachers have continuing and supportive contact and mutual long-term interest in their own professional development. As in preservice teacher preparation, teacher journal keeping could serve an integrative function for organizing, reflecting on, and applying that which is learned at the teacher center.

Limitations and Problems with Journal Keeping

Journal keeping is not a panacea for every problem and challenge in teacher education and professional development. And the systematic reflection procedure incorporated in Teacher Journal is offered as only one way to help people to get started in using writing as a professional development aid. I have neither illusions that it is the "one best way," nor that journal keeping is appropriate for or should be used by every teacher.

In our workshops and other introductions to journal keeping, some teachers have refused to write anything at all, saying that they came for answers from the "experts," not for an exercise in applying their own thinking. Others were concerned about how to insure the privacy of what they would write, or about the difficulty of talking about their own ideas with others. Some simply said that while the approach was interesting to them, writing was not a comfortable part of their personal style, or that they did not have the time or energy to keep a journal.

In the spirit of letting the learner do the learning, Yinger and I accept these decisions as making sense for these teachers. Teaching is basically an oral profession, and the demands on a teacher's time and energy can be overwhelming. Getting started in journal writing can be hard work, and the potential rewards will probably not be reaped immediately. In response to these teacher concerns Yinger and I have revised Teacher Journal and our introductions to systematic reflection to address the issue of privacy and the demands of writing, reflection, and dialogue. In the final analysis, what we hope we have produced is a tool for helping teachers and prospective teachers to become life-long students of their own professional development.

Reference Notes

1. Flower, L. S., & Hayes, J. R. A cognitive process theory of writing. Paper presented at the Conference on College Composition and Communication, March, 1980.
2. Clark, C. M. Teacher journal. Unpublished manuscript, 1980.
3. Clark, C. M., & Yinger, R. J. Three studies of teacher planning (Research Series No. 55). East Lansing, Michigan: Institute for Research on Teaching, Michigan State University, 1979.
4. Clark, C. M., & Yinger, R. J. The hidden world of teaching: Implications of research on teacher planning (Research Series No. 77). East Lansing, Michigan: Institute for Research on Teaching, Michigan State University, 1980.
5. Glassberg, S. Student-teaching supervision designed, implemented, and evaluated from a developmental perspective. Paper presented to the American Educational Research Association, New York, 1978.
6. Benham, B. J. The effect of reflective writing on identity maintenance in student teachers. Paper presented to the American Educational Research Association, San Francisco, 1979.
7. Oja, S. A cognitive-structural approach to adult ego, moral, and conceptual development through inservice teacher education. Unpublished doctoral dissertation. University of Minnesota. 1978.

References

Bereiter, C. Development in writing. In L. W. Gregg & E. R. Steinberg (Eds.), Cognitive processes in writing. Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1980.

Berliner, D. C. Tempus educare. In P. L. Peterson & H. J. Walberg (Eds.), Research on teaching: Concepts, findings, and implications. Berkeley, California: McCutchan, 1979.

Block, J. H. Mastery learning: Theory and practice. New York: Holt, Rinehart, and Winston, 1971.

Bloom, B. S. Learning for mastery. Evaluation Comment, 1968, 1, 1-12.

Bloom, B. S. Time and learning. American Psychologist, 1974, 29, 682-688.

Britton, J. Writing to learn and learning to write. In The humanity of English. Urbana, Illinois: National Council of Teachers of English, 1972.

Bruner, J. S. On knowing: Essays for the left hand. Cambridge, Massachusetts: Belknap Press of Harvard University, 1962.

Bruner, J. S., Oliver, R. R., & Greenfield, P. M. Studies in cognitive growth. New York: John Wiley and Sons, 1966.

Bruner, J. S. The relevance of education. New York: W. W. Norton and Company, 1971.

Carroll, J. B. A model for school learning. Teachers College Record, 1963, 64, 723-733.

Craik, F. I. M., & Lockhart, R. S. Levels of processing: A framework for memory research. Journal of Verbal Learning and Verbal Behavior, 1972, 11, 671-684.

Cronbach, L. J. & Snow, R. E. Aptitudes and instructional methods: A handbook for research on interactions. New York: Irvington, 1977.

Edwards, Betty. Drawing on the right side of the brain. New York: St. Martin's Press, 1970.

Elbow, P. Writing without teachers. New York: Oxford University Press, 1973.

Emig, J. Writing as a mode of learning. College Composition and Communication, 1977, 28, 122-128.

Gagné, R. M. Essentials of learning for instruction. Hinsdale, Illinois: The Dryden Press, 1974.

Gendlin, E. Focusing. New York: Everest House, 1978.

Hammond, K. R. Computer graphics as an aid to learning. Science, 1971, 172 (3986), 903-908.

Lockard, W. K. Design drawing. Tucson, Arizona: Pepper Publishing Company, 1974.

Luria, A. R. The directive function of speech in development and dissolution. Word, 1959, 15, 341-352.

Luria, A. R., & Yudovich, F. Speech and the development of mental processes in the child. Baltimore: Penguin, 1971.

McKeachie, W. J. The decline and fall of the laws of learning. Educational Researcher, 1974, 3, 7-11.

Nystrand, M., & Widerspeil, M. Case study of a personal journal: Notes towards an epistemology of writing. In M. Nystrand (Ed.), Language as a way of knowing: A book of readings. Toronto: The Ontario Institute for Studies in Education, 1977.

Odell, L. The process of writing and the process of learning. College Composition and Communication, 1980, 30, 42-50.

Olson, D. R. From utterance to text: The bias of language in speech and writing. Harvard Educational Review, 1977, 47 (3), 257-281.

Perl, S. Understanding composing. College Composition and Communication, 1981, 31, 363-369.

Polanyi, M. Personal knowledge: Toward a post-critical philosophy. Chicago: University of Chicago Press, 1958.

Progoff, I. At a journal workshop: The basic text and guide for using the intensive journal. New York: Dialogue House Library, 1975.

Rainer, T. The new diary: How to use a journal for self-guidance and expanded creativity. Los Angeles: J. P. Tarcher, 1978.

Rosenshine, B. Content, time and direct instruction. In P. L. Peterson & H. J. Walberg (Eds.) Research on teaching: Concepts, findings, and implications. Berkeley, California: McCutchan, 1979.

Vygotsky, L. S. Thought and language. Cambridge, Massachusetts: MIT Press, 1962.

Vygotsky, L. S. Mind in society. M. Cole, V. John-Steiner, S. Scribner, and E. Souberman (Eds.). Cambridge, Massachusetts: Harvard University Press, 1978.

Yinger, R. J. A study of teacher planning. The Elementary School Journal, 1980, 80(3), 107-127. (Also available as IRT Research Series No. 18, East Lansing, MI: Institute for Research on Teaching, Michigan State University, 1978.